

DOCUMENT RESUME

ED 250 502

CE 040 013

TITLE National Conference on Vocational Education and Training Policy for Today and Tomorrow. Summary Report (Washington, District of Columbia, March 15-16, 1984).

INSTITUTION Ohio State Univ., Columbus. National Center for Research in Vocational Education.

SPONS AGENCY National Advisory Council on Vocational Education, Washington, D.C.; National Commission for Employment Policy (DOL), Washington, D.C.; Office of Vocational and Adult Education (ED), Washington, DC.

PUB DATE Mar 84

NOTE 35p.; For the complete conference proceedings, see CE 040 014.

PUB TYPE Collected Works - Conference Proceedings (021)

EDRS PRICE MF01/PC02 Plus Postage.

DESCRIPTORS Demography; Economic Change; Educational Cooperation; Educational Needs; Educational Planning; *Educational Policy; *Educational Trends; *Futures (of Society); Government Role; Influences; *Job Training; Policy Formation; Postsecondary Education; *Public Policy; School Business Relationship; Secondary Education; Social Change; Technological Advancement; *Vocational Education

ABSTRACT

A two-day national conference was held to examine vocational education and training policy for today and tomorrow. Speakers from both the public and private sectors shared their expertise in various areas affecting vocational education. Focus of the papers and panel discussions presented during the conference was on the following topics: the possible impact of the international and domestic business environment on vocational education, the future role of the federal government in vocational education, the future role of state and local governments in vocational education, the impact of technological advancement on vocational education, and the advantages of a closer alliance between vocational education and business. Conference participants provided explanations of past and current trends in vocational education policy, practical speculation on the direction of those trends in the future, and possible responses to those trends. (This summary report outlines the major ideas presented at the conference and includes a copy of the conference agenda, a list of conference presenters and panelists, and a list of registered conference participants.) (MN)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED250502

**SUMMARY REPORT
OF THE
NATIONAL CONFERENCE ON
VOCATIONAL EDUCATION AND TRAINING POLICY
FOR TODAY AND TOMORROW**

March 15-16, 1984
Department of Commerce Auditorium
Washington, DC

Sponsored by

National Advisory Council on
Vocational Education

National Commission for Employment Policy

Office of Vocational and Adult Education
U.S. Department of Education

National Center for Research in
Vocational Education

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originating it.

☐ Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official NIE
position or policy.

THE COMPLETE TRANSCRIPT OF THE CONFERENCE PROCEEDINGS
IS AVAILABLE THROUGH
ERIC DOCUMENT REPRODUCTION SERVICE
P.O. BOX 190
ARLINGTON, VA. 22210
Tel: 703/823-0500

CE 040013

*"No domestic challenge is more crucial
than providing stable, permanent jobs for
all Americans who want to work..."*

*"Education, training and retraining are
fundamental to our success. Labor, management,
and government at all levels can and must
participate in improving these tools of growth."*

*President Ronald Reagan
State of the Union Address
January 25, 1983*

TABLE OF CONTENTS

Preface	1
Introduction	3
International Trends	5
Federal Government Trends	7
State and Local Trends	9
U.S. Business/Industry Trends	11
Vocational Education Trends	14
Conclusions	16
Recommendations	17

PREFACE

In the spring of 1984, the National Advisory Council on Vocational Education, Office of Vocational and Adult Education, U.S. Department of Education, the National Commission for Employment Policy, and the National Center for Research in Vocational Education, conducted a two-day conference on Vocational Education and Training Policy for Today and Tomorrow

The purpose was to enable members of related fields to share their practical views of areas that are influencing vocational education now and in the future. The conference sought opinions and insights from its speakers on:

- o the possible impact of the international and domestic business environment on vocational education
- o the future role of the federal government in vocational education
- o the future role of the state and local government in vocational education
- o the effect of technological advancement on vocational education
- o the advantages of a closer alliance between vocational education and business

Conference participants provided:

- o explanations of past and current trends
- o practical speculation on the direction of those trends in the future
- o possible responses to those trends

Speakers from both the public and private sectors spoke at this two-day conference. They included speakers from widely varying fields who shared their expertise in the areas that affect vocational education.

Their thoughtful views should receive serious consideration from those who are genuinely concerned with continuing excellence and relevancy in education.

Recent questions about the effects of rapid economic, technological and organizational change have brought into focus the need for a thoughtful assessment of the trends that concern vocational education.

The determination of a flexible, well-considered vocational education mission will enable vocational education to better prepare for the expectations and demands of its future role.

INTRODUCTION

The watchword in vocational education today is change. Teaching students marketable skills in an era of headlong technological advancement is a perplexing and absorbing challenge for those working in the field.

Council Chairman Edward D. Miller, in opening the Conference, said, "This conference grew out of concern by the National Advisory Council on Vocational Education, and shared by the other sponsors, over how effectively education and training programs will respond to the fast and ever-changing needs of the work place, as well as the needs of students for training and retraining which will provide them with the skills to participate productively in the work place."

Perhaps more so than any other occupational group, vocational education students reflect the impetus and direction of the country. Through their skills and abilities the plans of American industry and business will be executed. They will carry technological advancement to a tangible, beneficial conclusion.

But explosive advances in technology are making facilities and equipment obsolete long before their useful lives can be realized. At the same time, much of the skills and knowledge base that supports those facilities and equipment is undergoing change.

These changes are posing one of the most current challenges to vocational educators: continuously training and retraining workers to function productively in the workplace.

Current legislation reflects this need. New vocational education legislation emphasizes the need to match training programs with real job opportunities. It also offers special incentives for adult retraining and greater involvement of business and industry in the planning and development of programs.

Under the Job Training Partnership Act, seventy cents on the dollar will be spent on training, with the emphasis on acquiring marketable skills and future employment. In addition, the JTPA mandates that the business community play a major

role in targeting programs and cooperating with vocational education. With private sector involvement, both statutes hope to encourage in vocational education programs a "pro-active" response to job market changes rather than a "reactive" response.

The changing requirements in labor market needs and entry-level skills are taking place, not only on a domestic plane, but also on an international plane. Foreign labor markets have become more skilled, presenting a viable labor alternative for some major corporations.

Both domestically and internationally, business and industry are demanding a work force with a strong background of technical knowledge, and the communication skills that will enable them to make a flexible response to change.

Sue Lerner of Edison Electric Institute, Washington, D.C., told the Conference:

"Business is increasingly dissatisfied with the products of education. Numbers of businesses cannot get the kinds of people they want. So, in particular areas, a business will go into a local junior college or a local college and offer to pay for a particular program, or hire the personnel out of the university or out of a college or whatever institutional structure it is, to train employees, or potential employees in a particular activity.

"So, business is paying for education that in a prior orientation was paid for out of the tax base. That is a different way of looking at who pays. That also is something which has to be seriously examined."

How to provide these skills to vocational students within the context of rapid economic, organizational, and technological change is the basic nature of the challenge to vocational education today.

INTERNATIONAL TRENDS

The United States remains the leader of the economic world. First in economic stability, world market viability, productivity and technology development.

The international economic environment has been going through rapid changes as a result of international events such as the oil crisis, the Middle East conflict, value of the U.S. dollar overseas, and the emerging use of high technology, by the industrial world.

These changes have worldwide implications for our relationships with the industrial countries throughout the world.

National Security of our country is at stake because of our dependency upon the U.S. ability to maintain technological lead.

Greater international economic competition throughout the world is based upon emerging and advanced technologies. The leading world marketplace still rests here in the United States.

The United States has been the world's leading developer of technologies over the past twenty or more years. Through the use of U.S. technological developments, other foreign governments and foreign industries are reaching, and in some cases exceeding, the U.S. world leadership position in selected technological areas.

International economic competition is having far-reaching effects in the U.S. Foreign technological advancement, made through the use of U.S. research, is causing major changes in U.S. production, marketing, social structure, organizational structure, and skilled employment requirements.

U.S. industry's missions have changed to challenge this new worldwide economic competitive situation.

D. Bruce Merrifield of the Department of Commerce commented, "This is a critically important time in our history. We are faced with major forces of change that are continuously restructuring U.S. and world economies. The explosion of technology over the last thirty years, that's created something like ninety percent of everything we know in the sciences, making facilities and equipment obsolete long before their useful lives can be realized or are often amortized; as well, the skills and knowledge base that goes into those is changing as rapidly."

Vocational education's mission is challenged by these developments to support U.S. business and industry and to provide trained, skilled employees. The new trained, skilled employees need to be able to work in a new environment with both specialized skills and a higher level of general skills, which will enable workers to be flexible in transferring their skills as new applications arise due to developing technology.

NACVE member Vernon Broussard, Associate Professor at the University of Southern California, capsulized this concept in his summation. He said, "While we need to continue our efforts with regard to maintaining our preeminence in the areas of technology, it is important to focus on those "basic" skills It is of equal importance to focus on those hidden skills--the skills of self-confidence ... of persisting ... of thinking for oneself ... of loving and caring for others--recognizing that we live in a global world and a truly global economy."

FEDERAL GOVERNMENT TRENDS

The Federal Government has been moving in support of local determination with less reliance on direct Federal intervention. The movement in the Federal Government has been toward achieving a clearer division of responsibility.

This is based on the belief that local determination and responsibility can best meet the needs of the community, which is closest to the problems and most aware of the unique circumstances which impact on the solutions. David B. Walker, Assistant Director for Governmental Structures and Functions, Advisory Commission for Intergovernmental Relations said, "The issue is that of the role of the federal government as it is related to the roles of the state and local governments in vocational-technical education.

"The Reagan Administration believes that greater state and local government control through local determination is the way of the future. This new approach will bring about changes in our attitudes and viewpoints in addressing the future of vocational-technical education."

The thrust of this movement has been through three policy objectives:

- o The Federal Government is implementing a policy of deregulation of State programs that receive federal funds.

- o New legislation attempts to eliminate duplication and rigidity by allowing greater flexibility in administering programs to the States.

- o Greater flexibility and self-determination in making program funding decisions permit states to better prioritize the use of federal dollars, prevent administrative overlap in similar programs, and more accurately target State programs to meet their individual needs.

NACVE member William E. Hardman, President, National Tooling and Machining Association, summarized the issue as follows:

"I think we see the federal government's role and the trend that has started under the Reagan administration as perhaps the beginning of the proper way to do things. By that, I mean government's role has to be a very limited one in the lives and affairs of the American people, and particularly in the way they are trained for jobs and take jobs.

"The proper role of the Federal government, as we see it, should be to identify areas of national need and national problems, areas of national concern," he continued. "The Federal government should be monitoring the work force in all of the skills and technical and semi-technical areas, to make sure, from a matter of economic and military security, that we do not have any great gaps in any of the skilled trades or any of the technical areas of know-how.

"This is the kind of thing we see for the Federal government--identify those kinds of problems, and publicize them to the local areas. If the 50 states have control, that means there are 50 different units of government competing to do a better job in reaching the goals that have been identified. If we multiply that by the number of counties, cities, and local communities, it becomes thousands and thousands of competing units that can constantly refine and improve in a cooperative way--with only two entities involved, remember, the employers and the educators--to constantly improve the role of vocational education."

STATE AND LOCAL TRENDS

With the movement from the Federal Government toward the states, new roles are being developed on a state by state and local government level.

Governors and state legislatures must review and analyze vocational education laws, regulations and funding plans. States must interrelate their economic development and vocational education strategies to meet the challenges of organizational change.

Vocational and technical education will now have new principal partners, and the federal government will continue to play a limited partnership role.

With the rapid social, economic, business, and technological changes taking place in the U.S., vocational education must expand its partnership relations to include U.S. industry and business in order to develop vocational educational programs.

To meet national, state and local needs for skilled employees in a timely fashion, vocational education must involve business and industry to a greater extent than is now the case.

Each State and Local government must apply the principles of supply and demand to vocational education in their needs assessment and program development planning.

Vocational educators must match the supply of human resources--local or migrant, unskilled, semiskilled, or highly skilled--to employment opportunities at appropriate skill levels.

Vocational educators should apply the demand concept to both students and employers to correctly gauge human motivation and expectations.

U.S. industry and vocational education must confront the new challenges with new approaches to the technological revolution.

Industry's new approach is teamwork between management and employees to create a working relationship of coordination, cooperation, and communication with a common mission. Vocational education must integrate this approach into its programs to keep pace with the new business and industry trends.

U.S. BUSINESS AND INDUSTRY TRENDS

In the view of Conference participants, U.S. business and industry trends are increasingly affected by international competition. The results are changes in business organization and methods of production, and in utilization of technology and human resources.

To be competitive in the U.S. and world markets, U.S. business and industry have been required to reassess their industrial goals and redefine their priorities.

A product of U.S. industries strategic planning was the development of new mission statements, a set of guiding principles, and a plan to accomplish the mission.

Vocational education now is challenged to assess these new missions, principles and plans in order to meet industry's needs.

Some of these missions were defined as:

- o a commitment to excellence
- o a commitment to sustain growth for a leading role in the world economy
- o aggressively seeking new opportunities and business ventures that match our skills and capabilities
- o giving each employee the opportunity, environment, and incentive to promote maximum participation in meeting the collective goals
- o utilizing high technology in manufacturing and cost competitiveness in each manufacturing unit

More specific directions taken by U.S. industry today relate to changes in the workplace, and in the work force and its emerging skill requirements.

- o There is emphasis on overall promotion of the quality ethic, and an all-out drive in product quality.
- o New work patterns are emerging from this new work ethic: motivation, team concepts, self-management, autonomous work groups and greater employee participation and interaction.

o These new patterns require improved communication, coordination, and cooperation while focusing on interpersonal and problem solving skills.

o Advanced technologies are now being applied to improve product quality and productivity through new, advanced manufacturing and assembly techniques--just-in-time inventory centers and automated processing--in order to improve quality and reduce costs.

William MacKinnon, Vice President, Personnel Administration & Development Staff, General Motors, addressed the Conference and outlined some key thoughts about the vocational educational system, and about the future.

He observed:

o We need bright, capable people in our technician jobs who can read well, reason well, and have good interpersonal skills. We can't afford any other kind.

o We still have the same old problems; many kids who don't do well academically are steered by parents and teachers into voc-ed programs. If they take easy electives, and continue to goof off, we end up with the graduates who can't compete and need remedial training.

o We should start at the fifth, sixth, and seventh grades with vocational awareness programs so that the youngsters can set goals, take the tough courses, do well, and be proud of their career choices.

o Manufacturers must donate more of their current equipment to the schools and help train the teachers on that equipment. That's how you get current technology into the schools.

He also commented, "As product improvements in safety, emission, fuel economy, and performance become more complex, we and the dealers became concerned about training people for skills that would make them equal to the challenge. The mission to increase their technical competence was never greater because the pace of technological change in our products was never greater."

"We are looking at an unusual situation to be sure, but again it reflects an increased use of community-based educational institutions to bolster vocational skills. Many plants are studying additional ways to utilize these institutions."

VOCATIONAL EDUCATION TRENDS

Panelist Matthew J. Puleo, Vice President, Human Resources Group; Yankelovick, Skelly, and White, Inc., observed:

"The only thing that we really are positive about today is that change is with us forever, and in fact, change and knowing that we will always have change is the only thing that we can count on. That is probably going to be the component for success in the future, not only in terms of education, but in the ability to respond to the business challenges of tomorrow."

If occupations are to undergo rapid and unpredictable changes, how can vocational education and public training programs respond?

One of the most often repeated recommendations is to improve the basic education of all future workers. Employers obviously want entry-level workers to have better communication and computational skills than current applicants demonstrate. American Vocational Association Executive Director Gene Bottoms' comment on this issue is quite relevant. He said:

"If jobs are changing as rapidly as indicated because of the applications of new and improved technology, this has implications for vocational education, for it suggests that we should stress the historical roots of the field. That is, we should strengthen the 'E' in vocational education."

He further noted that the early advocates of vocational education stressed the "E." To them, vocational education was a way to link academic knowledge to the practices of an occupational field. Vocational education included an understanding of the scientific and technical knowledge that underlies practice.

The call for better basic preparations of new workers reflects changes in entry-level requirements. As these requirements increase and become institutionalized, those individuals who have not acquired basic skills will find it increasingly more difficult to advance in the job market. That is, as the overall skill demand for the next level increases, the utility of on-the-job training decreases.

Researchers have shown that job demand will be strong in such occupational areas as fast food services, retail trades, and janitorial services. These areas are generally characterized as requiring minimal basic and occupational skills, paying low wages, and having high turnover with little opportunity for career advancement.

Consequently, workers with insufficient skills will be tracked into this tier of jobs. They will remain at that level, their potential dormant, until they acquire the increasingly more complex and interrelated set of basic skills.

The level of basic skills required to move into many entry-level jobs has risen, due mainly to technological change. In order to move into jobs that are career-oriented and upwardly mobile, the vocational education students will need to be specialists with a generalized technical knowledge of their field.

Their training must provide them with the flexibility to adjust to advances in equipment or method. And they must possess the comprehensive reading and communication skills necessary to make these adjustments.

K. Edwin Graham, Director of External Relations Projects at the American Council on Life Insurance explained, "The key questions are the attitudes, needs, and institutions of our society changing at such a pace that they outdistance the ability of the social institutions to accommodate those changes; or are they changing at such a rate that, given the time allotted, we can adjust to them sufficiently and retain the social, political, and educational institutions currently in place?"

"The work place expects certain skills of the entry level employees and those who move ahead," he continued. "Corporations, labor, education, and government share the responsibility for seeing that those needs are met.

"We must cooperate with each other ... the job market demands it as never before. Education, business, and government must find new and creative ways to work together."

CONCLUSIONS

The major trends anticipated by all the participants was for high rates of technological change during the remainder of this century. These changes are expected to have a major impact on the International economic environment, U.S. Federal Government, State and Local Governments, and vocational-technical education institutions.

- o International economic and business environment will exert more influence upon shaping U.S. policies for trained, skilled workers.

- o The trend in U.S. policy will be to rely on greater self-determination for the States through deregulation of federally funded State programs, and the administration of more economically efficient block grants.

- o State and Local Governments will play a more active role in the formulation, control and financing of State programs. State and Local Governments will also need to establish a closer alliance with the private sector to target and formulate their vocational education programs.

- o U.S. business and industry will need to work more closely with the State and Local Governments and vocational-technical education institutions in developing programs, providing technological support, and explaining the private sector's new directions.

- o The trend in vocational-technical education will be toward higher technical skill requirements, greater need for sophisticated communication skills, and an increasing demand for a flexible response to changes in the workplace, in both industrial and service occupations areas.

RECOMMENDATIONS

- o The Federal Government's new role should be more related to the global technological changes taking place. The National Advisory Council on Vocational Education, National Center for Research in Vocational Education, and the Office of Vocational and Adult Education, U.S. Department of Education, should be the repository of knowledge of technological change on an international and domestic level.
- o State and Local Governments and State Advisory Councils on Vocational Education must involve U.S. business and industry to the maximum extent possible in order to remain abreast of the needs and trends in employment.
- o State Advisory Councils on Vocational Education and educational institutions must become more aware of entry-level employment needs associated with new and emerging technology.
- o There must be changes in delivery systems and instructional programs to accommodate the requirements for expanded adult retraining, non-traditional students, and those who enter the system with different levels of basic skills, science, and math.
- o U.S. business and industry must assess personnel requirements in light of technological advancement and provide vocational educators with sufficient guidance to make changes in curriculum and facilities.
- o U.S. business and industry should also be prepared to support vocational education by providing equipment, teacher training and upgrading, and other assistance necessary to develop the desired job skills.

AGENDA

MARCH 15, 1984

8:00am Registration
Main Entrance
Department of Commerce

8:45-9:15 Welcome and Conference Overview
Edward D. Miller, Conference Chairman and
Chairman National Advisory Council on
Vocational Education
President and Chief Executive Officer
Future Business Leaders of America/
Phi Beta Lambda
Washington, DC

D. Bruce Merrifield
Assistant Secretary for Productivity,
Technology, and Innovation
Department of Commerce
Washington, DC

Kenneth M. Smith, Chairman
National Commission for Employment Policy
President and Chief Executive Officer,
International Management and Development Group
Washington, DC

James W. Griffith
Executive Director, National Advisory
Council on Vocational Education
Washington, DC

9:15-11:45 Topic: Trends and Changes in Federal, State
and Local Governmental Roles During the
Remainder of This Century

Moderator: George W. Fellendorf
President, Fellendorf Associates
Silver Spring, MD

9:15-10:00 Speaker: David B. Walker, Assistant Director for
Governmental Structures and Functions
Advisory Commission for
Intergovernmental Relations
Washington, DC

10:00-10:30 Break

10:30-11:10 Panel-Reaction and Comment

R. Edwin Graham
Director, External Relations Projects
American Council on Life Insurance
Washington, DC

Jack A. Griffith
President, Griffith Petroleum
Stillwater, OK
President, National Oil Jobbers Association
Washington, DC

William E. Hardman
President, National Tooling and Machining
Association
Ft. Washington, MD

Madeleine B. Hemmings
Vice President, Policy
National Alliance of Business
Washington, DC

Robert M. Worthington
Assistant Secretary for Vocational and Adult
Education, U.S. Department of Education
Washington, DC

11:10-11:30 Panel Discussion and Interchange

11:30-11:45 Audience Question and Answer Period

11:45-1:00 Lunch

1:15-4:00 Topic: Social and Demographic Trends and Changes
During the Remainder of This Century

Moderator: Vernon Broussard
Associate Professor
University of Southern California
Los Angeles, CA

1:15-2:00 Speaker: Sue G. Lerner
Director Corporate Planning
Edison Electric Institute
Washington, DC

2:00-2:40 Panel-Reaction and Comment

Gene Bottoms
Executive Director
American Vocational Association
Arlington, VA

Ralph T. Doshier
Manager Corporate Education
Texas Instruments
Dallas, TX

Sybil Kyi
Executive Secretary
Hawaii State Advisory Council on Vocational
Education and State Commission on Manpower
and Full Employment
Honolulu, HI

Matthew J. Puleo
Vice President, Human Resources Group
Yankelovick, Skelly, and White, Inc.

Robert E. Taylor
Executive Director
National Center for Research in
Vocational Education
Columbus, OH

2:40-3:00 Panel Discussion and Interchange

3:00-3:30 Break

3:30-3:45 Audience Question and Answer Period

4:00 Recess

MARCH 16, 1984

9:00-11:15am Topic: Trends and Changes in the Economy
During the Remainder of This Century

Moderator: Jean Hanson
Convergent Systems, Inc.
St. Paul, MN

9:00-9:45 Speaker: William P. MacKinnon
Vice President
Personnel Administration and
Development Staff
General Motors Corporation
Detroit, MI

9:45-10:25 Panel--Reaction and Comment

Dennis D. Bowden
Training Coordinator
Lawrence Livermore National Laboratory
Livermore, CA

Douglas Ramsey
Editor, Business Times
New York, NY

Gail Garfield Schwartz
President
Garfield Schwartz Associates, Inc.
Washington, DC

Francis Tuttle
State Director
State Department of Vocational-Technical
Education
Stillwater, OK

10:25-10:40 Break

10:40-11:00 Panel Discussion and Interchange

11:00-11:15 Audience Question and Answer Period

11:15-12:00 Topic: Public Policy and Communication

11:15-11:45 Speaker: Robert S. Goralski
Writer and Lecturer
Washington, DC

11:45-12:00 Audience Question and Answer Period

12:00-1:00 Lunch

1:00-2:15 Panel--Analysis of Policy for Vocational
Education and Training

Moderator: Joanne Dwyer
Guidance Counselor
Dauphin County Technical School
Harrisburg, PA

1:00-1:45 Panel: Vernon Broussard
George Fellendorf
Jean Hanson
Francis Tuttle

Wallace Vog
Executive Director
New York State Advisory Council
on Vocational Education
Albany, NY

1:45-2:15 Audience Comments on Policy Requirements

2:15-2:30 Closing Remarks

Edward D. Miller
Kenneth M. Smith

PRESENTERS/PANELISTS

NATIONAL CONFERENCE ON VOCATIONAL EDUCATION AND TRAINING POLICY FOR TODAY AND TOMORROW

Dr. Gene Bottoms
Executive Director
American Vocational Association
Arlington, VA

Mr. Dennis D. Bowden
Training Coordinator
Lawrence Livermore National
Laboratories
Livermore, CA

Dr. Vernon Broussard
Associate Professor
University of Southern California
Culver City, LA

Mr. Ralph T. Doshier
Manager Corporate Education
Texas Instruments
Dallas, TX

Mrs. Joanne Dwyer
Guidance Counselor
Dauphin County Technical School
Hershey, PA

Dr. George Fellendorf
President, Fellendorf Associates
Silver Spring, MD

Mr. Robert Goralski
Writer and Lecturer
McLean, VA

Mr. K. Edwin Graham
Director, External Relations Projects
American Council on Life Insurance
Washington, DC

Mr. Jack Griffith
President
Griffith Petroleum
Stillwater, OK

Dr. Jean Hanson
Convergent Systems, Inc.
St. Paul, MN

Mr. William E. Hardman, President
National Tooling and Machining Assoc.
Ft. Washington, MD

Mrs. Madeleine B. Hemmings
Vice President for Policy
National Alliance of Business
Washington, DC

Ms. Sybil Kyi
Executive Secretary, SAC
State Commission on Manpower and
Full Employment
Honolulu, HI

Mrs. Sue G. Lerner
Director Corporate Planning
Edison Electric Institute
Washington, DC

Mr. William R. MacKinnon
Vice President
Personnel Administration and
Development Staff
General Motors Corporation
Detroit, MI

Mr. Matthew J. Puleo
Vice President
Human Resources Group
Yankelovich, Skelly and
White, Inc.
New York, NY

Mr. Douglas Ramsey
Editor
Business Times
New York, NY

Dr. Gail Garfield Schwartz
President
Garfield Schwartz Associates, Inc.
Washington, DC

Dr. Robert Taylor
Executive Director
The National Center for Research
in Vocational Education
The Ohio State University
Columbus, OH

Dr. Francis Tuttle
State Director
State Department of Vocational-
Technical Education
Stillwater, OK

Mr. Wallace Vog
Executive Director
New York Advisory Council
on Vocational Education
Albany, NY

Dr. Dave B. Walker
Assistant Director for Government
Structures and Functions
Advisory Commission for
Intergovernmental Relations
Washington, DC

Dr. Robert Worthington
Assistant Secretary for Vocational
and Adult Education
U.S. Department of Education
Washington, DC

REGISTERED PARTICIPANTS

NATIONAL CONFERENCE ON VOCATIONAL EDUCATION AND TRAINING POLICY FOR TODAY AND TOMORROW

Mr. William C. Arena
Coordinator of Training
Western Connecticut Carpenters JAC
Norwalk, CT

Mr. Jim Auerbach
Staff Representative
AFL-CIO Department of Education
Washington, DC

Ms. Wilma Bailey
Public Affairs Specialist
U.S. Department of Education
Washington, DC

Mr. Melvin Baker
U.S. Department of Education
Office for Civil Rights
Washington, DC

Ms. Delores Battle
Deputy Director
Office of Research and Evaluation
Office of Strategic Planning and
Policy Development
Washington, DC

Mr. MacKnight Black
Vocational Education Data Systems
National Center for Education
Statistics
Washington, DC

Dr. Richard Blocker
Director, Student Services & Programs
Virginia State Advisory Council
Arlington Public Schools
Arlington, VA

Mr. Glenn Boerrigter
Chief, PISB, OID
Office of Vocational and Adult
Education
Washington, DC

Mr. Paul V. Braden
Economist
Office of Productivity, Technology
and Innovation
U.S. Department of Commerce
Washington, DC

Dr. Ron Bucknam
Senior Associate
National Institute of Education
Washington, DC

David S. Bushnell, Director
Center for the Improvement
of Productivity
George Mason University
Fairfax, VA

Dr. Charles H. Buzzell
Director, Policy Analysis Staff
Department of Education
Washington, DC

Mr. Edwin L. Caldwell, Jr.
State Advisory Council on Education
Raleigh, NC

Edward X. Canning
Director of Training
Western Connecticut Carpenters Joint
Apprentice Committee
Norwalk, CT

Mr. Richard E. Carlson
Assistant Administrator
Division of Postsecondary and
Vocational Education Statistics
U.S. Department of Education
Washington, DC

Mr. Joseph Clark
Deputy Director
National Technical Information Service
Washington, DC

Mr. Tim Coffey
Director of Student Services
Distributive Education Clubs of America
Reston, VA

Mr. George Colyer
Chief of Comprehensive Planning
City of Alexandria, Virginia
Alexandria, VA

Ms. Charlotte Conaway
Education Program Specialist
Office of Vocational and
Adult Education
U.S. Department of Education
Washington, DC

Mr. Woody Cox
Director
Future Farmers of America
Alumni Association
Alexandria, VA

Ms. Marion Craft
Office of Vocational and
Adult Education
U.S. Department of Education
Washington, DC

Mr. Robert Craig
Vice President
Government and Public Affairs
American Society for Training
and Development
Washington, DC

Mr. Christopher T. Cross
Executive Vice President
University Research Corporation
Chevy Chase, MD

Ms. Amalia Cuervo
Director of Research
National School Board Association
Washington, DC

Mr. James Culligan
Executive Director
Florida Advisory Council on
Vocational Education
Tallahassee, FL

Ms. Annette T. D'Annunzio
Administrator
Corporate Support Programs
Philip Morris Incorporated
New York, NY

Dr. Dolores Davis
Program Analyst
DC Department of Employment Services
Washington, DC

Ms. Stella Dawson
News Reporter
VocED Weekly
Rosslyn, VA

Mr. Richard Dempsey
Coordinator
Occupational Information Systems
National Occupational Information
Coordinating Committee
Washington, DC

Dr. Joseph Dickey
Legislative Assistant
Representative Edwin Zschau
Washington, DC

Mr. Howard F. Didsbury, Jr.
Media Director
World Future Society
Washington, DC

Mr. Earl J. Dodrill
Senior Program Advisor
Division of Adult Education Services
U.S. Department of Education
Washington, DC

Mr. Eugene Dolan
Associate Professor
CISS Department
University of District of Columbia
Washington, DC

Mr. William Eckert
Takoma Park, MD

Dr. S. Norman Feingold
President
National Career and Counseling Service
Washington, DC

Ms. Sherry Freeman
Education USA
Arlington, VA

Dr. John Gammito
Technical Publishing Co. Training
Barrington, IL

Ms. Barbara Glancy
Social Science Analyst
Department of Education
Office of Civil Rights
Washington, DC

Mr. James R. Goff, Jr.
Vice President
Virginia Health Occupations Education
Advisory Council
Richmond, VA

Mr. Gerard G. Gold
Senior Program Officer
National Institute for Work
and Learning
Washington, DC

Mr. Michael Gonzales
Assistant for State Associations
National Association of Trade and
Technical Schools
Washington, DC

Dr. Lawrence P. Grayson
Institute Advisor for Mathematics,
Science and Technology
National Institute of Education
Washington, DC

Gisela Harkin, Guidance Specialist
Office of Vocational and Adult
Education
U.S. Department of Education
Washington, DC

Mr. Robert Harrison
Criminal Justice Consultant
Executive Office of the Mayor
Washington, DC

Mr. Carl E. Herr
Executive Director
Pennsylvania Advisory Council
on Vocational Education
Harrisburg, PA

Ms. Patricia Hines
Associate, National Council on
Education Research
NCER
Washington, DC

Mr. Howard F. Hjelm
Director
Division of Innovation and Development
U.S. Department of Education
Washington, DC

Ms. Brenda Holmes
Executive Director
DC State Advisory Council
Washington, DC

Dr. Florence L. Hood
Professor and Educator
Norfolk State University
World Future Society
Portsmouth, VA

Mr. Larry W. Johnson
Chief Executive Office
Vocational Industrial Clubs
of America
Leesburg, VA

Mr. Peter Johnson
Executive Director
Illinois Advisory Council on Adult,
Vocational, and Technical Education
Springfield, IL

Mr. Richard Johnson
Policy Analyst
Office of Productivity, Technology,
and Innovation
U.S. Department of Commerce
Washington, DC

Mr. H. C. Kazanas
Professor
University of Illinois
Champaign, IL

Ms. Julie Kolberg
Research Assistant
Control Data Corporation;
Government Affairs
Washington, DC

Ms. Nancy R. Kuhn
Staff Director, Human Resources
President's Commission on
Industrial Competitiveness
Washington, DC

Dr. Paul Larkin
Consultant
World Future Society
Bethesda, MD

Mr. E. Michael Latta
Executive Director
Advisory Council on
Vocational Education
Raleigh, NC

Mr. Jay D. Lewis
Intern
ETA/Department of Labor
Washington, DC

Ms. Juliette N. Lester
Education Program Specialist
U.S. Department of Education
Washington, DC

Ms. Louisa Liddell
Executive Director
Future Homemakers of America
Reston, VA

Mr. Harry Lieberman
Project Officer
Office of Research and Evaluation
Employment and Training Administration
U.S. Department of Labor
Washington, DC

Dr. John J. Light
President
Hocking Technical College
Nelsonville, OH

Mr. Jim Mahoney
Assistant Vice President for
Federal Relations
American Association of Community
and Junior Colleges
Washington, DC

Mr. Gerald Malitz
Vocational Education Data System
National Center for Education
Statistics
U.S. Department of Education
Washington, DC

Mr. Richard Mallory
Staff Associate
National Education Association
Washington, DC

Ms. Patricia O'Brien Marsh
President
Data Processing Management Assoc.
Silver Spring, MD

Ms. Susan Marshall
AFL-CIO Human Resources Development
Institute
Washington, DC

Mr. Howard Mathews
Committee on Labor and Human Resources
U.S. Senate
Washington, DC

Mr. Ronald D. McCage
Director
V-Tecs/SACS
Atlanta, GA

Dr. Richard P. Melia
Rehabilitation Research Analyst
National Institute of Handicapped
Research
U.S. Department of Education
Washington, DC

Mr. C. G. Michel
Assistant Superintendent for
Vocational Education
El Paso Independent School District
El Paso, TX

Mr. Roy H. Millenson
Director, Education and
Library Affairs
Association of America Publishers
Washington, DC

Mr. Robert Miller
Office of Vocational and
Adult Education
U.S. Department of Education
Washington, DC

Mr. Reggie Moore
Assistant Director
Office of Interorganizations
U.S. Department of Labor
Bureau of International Labor Affairs
Washington, DC

Mr. Robert L. Morgan
Chief, Vocational Education Data
System
National Center Education
Statistics
Education Department
Washington, DC

Mr. Robert Moy
Equal Opportunity Specialist
U.S. Department of Education
Office of Civil Rights
Washington, DC

Mr. David P. Straub
Regional Manager
TPC Training Systems
New York, NY

Dr. Hilda Stronzenberg-Szklo
InterAmerican Development Bank
Washington, DC

Dr. John W. Struck
Executive Director
National Association of State
Directors of Vocational Education
Camp Hill, PA

Dr. John R. Swallow
NE/TECH/HRST, Room 6754
AID/Department of State
Washington, DC

Ms. JoAnn Wakelyn
State Student Specialist
Health Occupations Education Service
Richmond, VA

Mr. Jim Warren
Office of Vocational and
Adult Education
U.S. Department of Education
Washington, DC

Ms. Laura DeKoven Waxman
Assistant Executive Director
U.S. Conference of Mayors
Washington, DC

Mr. David H. Weaver
Vice President, General Manager
McGraw-Hill Book Company
Gregg Division
New York, NY

Mr. David L. White
Director
Division of Career Development
District of Columbia Public Schools
Washington, DC

Ms. Elaine Wicker, Editor
Congressional Clearinghouse
on the Future
Washington, DC

Ms. Gail Williams
Assistant Editor
Employment and Training Reporter
Washington, DC

Dr. Marcile Wood
Arlington, VA

Ms. Nancy Word
Assistant Director
DC State Advisory Council
Washington, DC

Dr. Jane Work
Director Legislative Analysis
National Association of Manufacturers
Washington, DC

Mr. James Wykle
Office of Vocational and
Adult Education
U.S. Department of Education
Washington, DC

Mr. Margret Zelinko
Job Corps
Department of Labor
Washington, DC

Mr. Arnold Mysior
Director
Center for Applied Psychology
Washington, DC

Mr. Thomas Nardone
Economist
Bureau of Labor Statistics
Department of Labor
Washington, DC

Mr. John Nealon
Chief of Special Programs Branch
Department of Education
Office of Vocational and
Adult Education
Washington, DC

Mr. Thomas O'Brien
Council Member
Pennsylvania Advisory Council
on Vocational Education
Harrisburg, PA

Ms. Shirley A. O'Conner
Coordinator
RPI
Educational Resource Association
Dover, DE

Mr. Gabriel Ofiesh
Professor of Education
Howard University
Washington, DC

Ms. Jody Olson
Communication Specialist
Office Education Association
Columbus, OH

Mr. Emanuel Orlick
Special Assistant
Office of Management
U.S. Small Business Administration
Washington, DC

Dr. George Orr, Jr.
Executive Director
Virginia State Advisory Council
Blackburg, VA

Mr. Thomas J. Palumbo
Survey Statistician
Bureau of the Census
Washington, DC

Mr. Walter Penrod
Executive Director
Indiana Advisory Council on
Vocational Education
Indianapolis, IN

Ms. Ruth Petkoff
Curriculum Supervisor
Northern Virginia Skill Center
Arlington, VA

Mr. John Priebe
Supervisory Statistician
Bureau of the Census
Washington, DC

Mr. Cleveland Randle
Office of Vocational and
Adult Education
U.S. Department of Education
Washington, DC

Mr. Rodney Riffel
Job Training Program Manager
National Conference of State
Legislatures
Washington, DC

Mr. Neal H. Rosenthal
Chief, Division of Occupational
Outlook
Bureau of Labor Statistics
Washington, DC

Ms. Lenore E. Saltman
Coordinator for Voluntary Education
Office of Training and Education
Department of Defense
Washington, DC

Mr. Thomas S. Scopp
Chief, Labor Force Statistics Branch
Population Division
Bureau of the Census
Washington, DC

Mr. William Scott
Council Member
DC State Advisory Council
Washington, DC

Mr. Sam Stenzel
Executive Director
National Vocational Agricultural
Teacher Association
Alexandria, VA

NACVE



NATIONAL ADVISORY COUNCIL ON VOCATIONAL EDUCATION

Edward D. Miller, Chairman - MD

Jean Hanson, Vice-Chairman - MN

MEMBERS

Adolphus Andrews, III - CA
Betty Breaux - LA
Vernon Broussard - CA
James H. Buford - MO
Pedro Diaz, Jr. - TX
Joanne M Dwyer - PA
Gladys S. Eddy - CO
George W. Fellendorf - MD
Harold Goldberg - NH
Reuben T. Guenther - ND
William E. Hardman - MD
Joan Kenney - NV
Esther Levens - KS
William J. McGinnis, Jr. - NJ
Byrl R. Shoemaker - OH
Kenneth M. Smith - DC
Calvin W. Stephens - TX
Peter Wrenn - IL

Teresa Montz - TX, Student Member

STAFF

James W. Griffith, Executive Director
George Wallrodt, Deputy Exec. Dir.
Ralph Bregman, Dir. of Evaluation
Carolyn Edwards, Administrative Asst.